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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/804,234 | 03/19/2004 | Michael Wiesinger | 66374-151-7 | 6080 |

25269 7590 02/05/2007
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| EXAMINER |
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NOORI, MAX H

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| ART UNIT | PAPER NUMBER |
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2855

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS | 02/05/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/804,234

Applicant(s)

WIESINGER ET AL.

Examiner

Max Noori

Art Unit

2855

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 30-42 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 30,33 and 37-42 is/are rejected.
- 7) ☒ Claim(s) 31,32 and 34-36 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application
- ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 30, 33, 37, and 41 are rejected under 35 U.S.C. 102(b) as being anticipated by Heald.

Regarding claims 30, 37, Heald et al., US Patent 6,668,855., discloses a pressure regulator with features of the claimed invention which comprising a housing which includes an upper housing body (element 12) and a lower housing body (element 14), the housing bodies defining an internal chamber there between, the lower housing body furthermore defining an inlet channel (element 22), an outlet Channel (element 24), and a valve channel (element 32) there between, a flexible diaphragm (element 56) mounted inside said housing dividing the internal chamber into a variable volume upper and lower chambers, the diaphragm biasing a movable valve element to open said valve channel when said upper chamber assumes its channel flexible diaphragm moves downwardly to enlarge said upper chamber and shrink said lower chamber, and to close said valve channel when said flexible diaphragm moves upwardly to shrink said upper chamber and enlarge said lower chamber, first and second biasing means for biasing valve to open or close the valve channel with the movement of the flexible diaphragm

(see, for example, claim 11), and a bore in said lower housing part to connect said outlet channel with said lower chamber (element 36).

Regarding claim 33, the biasing means is a compression spring.

Regarding claim 41, the form of the diaphragm can be concave or convex upon the amount of pressure or vacuum.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 37-40, 42, are rejected under 35 U.S.C. 103(a) as being unpatentable over Heald et al in view of Carlisle et al.

Regarding claims 37- 38 Even though a pressure regulator is generally used in a flow system, which usually consists of its essential elements such as flow meter, a supply tank/supply line, pump, various flow conditioning and son on, but due to his emphasis in the regulator itself, Heald teal., does not elaborate on other elements of a system. Such general flow system is notoriously known. For example, Carlisle et al., teaches a system and method of using a Coriolis mass flow rate, which include the related tank, supply line, regulator, pump and other essential elements. It would have been obvious, therefore, for a skilled artisan at the time of the invention to use Heald regulator in a system, as it is intended to be used in such an arrangement in order to have a meaningful usage.

Regarding claim 39, Carlisle shows a pump(see figure 1).

Regarding claim 40, Carlisle shows a Coriolis flow meter (see figure 1).

Regarding claim 42, the form of the diaphragm can be concave or convex upon the amount of pressure or vacuum.

4. Claims 31-32, and 34-36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Amendment

5. Applicant's amendment and arguments filed 11/21/06 have been fully considered but they are moot in view of the new ground of rejection.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for response to this final action is set to expire THREE MONTHS from the date of this action. In the event a first response is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for response expire later than SIX MONTHS from the date of this final action.

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7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Max H. Noori whose telephone number is (571) 272-2185. The examiner can normally be reached on Tuesday-Friday from 8:00 AM to 6:00 P.M.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-2800. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. The central fax number is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MHN

Monday, January 29, 2007



MAX NOORI
PRIMARY EXAMINER